ACCREDITATION STATEMENT - TRANSMITTAL COVER MEMO

DD-MMM-YY

MEMORANDUM FOR HQ *Majcom*/DR

FROM: HQ *Majcom*/DRA
         Address

SUBJECT: Accreditation Report for *Program name* Analysis of Alternatives (AoA).

     I have reviewed the recommendations contained in the attached model accreditation report. On the basis of this review, I accredit the use of the following model(s) by HQ *Majcom*/DRA for the *Program name* AOA:

List the Model(s)

List any restrictions

        Signature Block for HQ *Majcom*/DR

Attachments:
1. Executive Summary for Model and Data Accreditation Report for *Program name* AOA
2. Model and Data Accreditation Report for *Program name* AOA

EXECUTIVE SUMMARY
for
Model and Data Accreditation Report
for
Program name **Analysis of Alternatives (AOA)**

1 . Problem Statement
    State the mission tasks (MTs) of the AoA and list the proposed models that will evaluate the measures of effectiveness (MOEs).

2. Usage of Selected Models
    Write a paragraph describing each model. Explain the MOE's that the model will provide, and how they relate to the functional objective.

3. Key Participants
    List the accreditation agent, verification and validation (V&V) agents, verification, validation and accreditation (VV&A) manager, analysts involved in VV&A, and data validators. Also include their organizations and their roles/responsibilities.

4. Data Sources and Validation
    Explain how the model(s) input data and key performance parameters were derived.

5. Accreditation Methodology
    Give a brief explanation of the accreditation plan and process.

6. Summary of Verification and Validation (V&V)
    List each model and summarize the V&V.

7. Acceptability Criteria and Model Assessments
    Statement of confidence in model(s) resulting from the accreditation process.
    Tabular breakout of model(s) versus assessment criteria.

Model and Data Accreditation Report

for

Program name

Analysis of Alternatives (AOA)

dd-mm-yy

Prepared by

AFMC/DR - OAS

Author

TABLE OF CONTENTS

TABLES AND FIGURES

A . Problem Statement
State the objective of the AoA, list the measures of effectiveness (MOE), and define the models proposed to evaluate the MOE's

B. Key Participants
List the accreditation agent, V&V agents, VV&A manager, analysts involved in VV&A, and data validators. Also include their organizations and their roles/responsibilities.

C. Objective
State the goal of this report. Include a statement that the requirements for AFI 16-1001 are being met.

D. Data Reports
1. Threat and Scenarios
Explain in detail how the data for the threat and the baseline scenarios were developed.

2. System Performance Data
a. Input Data
Explain in detail how the model input data and key performance parameters (KPP) were developed. KPPs are essential threshold characteristics and capabilities that the proposed system must meet.

b. Output Data
Explain in detail how the output data was analyzed.

E. Model Reports

1. *Model 1 name* **VV&A Plan**
Summarize the VV&A plan used for this model.
Phase 0 efforts require only face validation.
Phase I efforts also require functional validation.
Digital simulation models (DSM) also require results validation.
The requirements for each validation type is defined in sections **e, f,** and **g** below.

a. *Model 1 name* **Supported Tasks and MOEs**
Detail the supported mission tasks (MTs), and the MOEs that this model will provide.

b. *Model 1 name* **Model Use**
Give an overview detailing the model's intended purpose.

c. *Model 1 name* **Background and Capabilities**
    Detail the development and sophistication of the model. Detail the input parameters and flexibility. Determine how well the model simulates tasks and provides MOEs.

d. *Model 1 name* **V&V History**
    Detail the V&V history of the model that relates to this effort. For many models, prior V&V can be used to accredit the model for current efforts. For instance, if only face validation is required for a task, and it has already been done for a parallel, include the work here and move on to deficiencies and risks. If not, then continue with the following items.

e. *Model 1 name* **Face Validation**
    The following steps are performed for Face Validation, which is required to accredit all models.

    e.1 Configuration Management
        Detail the baseline configuration, and the methods for controlling changes to the baseline.

    e.2 Version Changes and Enhancements
        Provide a history of the version changes and the enhancements that effected the change.

    e.3 User Documentation
        Evaluate the user manuals.

    e.4 Output
        Examine the data and determine if it provides what is needed, and if it appears to be correct.

    e.5 Assumptions, Limitations, and Errors
        Document the inherent assumptions of the model, and any limitations that could present a problem. Also include any errors that modelers have encountered.

f. *Model 1 name* **Functional Validation**
    In addition to face validation, functional validation is performed on all models supporting Phase I AoA's.

    f.1 Software Development Documentation
        Evaluate the documentation used by the model developers.

f.2 Source Code Review
Evaluate the source code for the model.

f.3 Algorithms and Equations
Evaluate the algorithms and equations used.

f.4 Sensitivity Analysis
Perform a sensitivity analysis on select input variables, and evaluate the results.

g. *Model 1 name* **Results Validation**
Results validation will usually be done only when the model is to be used as a digital simulation model (DSM), which must be an accurate representation of the deployed system. Face validation and functional validation will be performed first.

g.1 Comparison to Validated Models
Results from this model will be compared to the results from a model which has already undergone results validation.

g.2 Comparison to Experimental Results
Results from this model will be compared to experimental results. If testing is done primarily to validate this model, then the validation iteration would be:

Model prediction ➤ Experiment ➤ Compare Results ➤ Refine Model

h. *Model 1 name* **Deficiencies and Risks**
List any deficiencies and risks. An example would be a model that does not have a configuration management plan, but would meet all other validation requirements. List the steps taken to negate any deficiencies. If necessary, include a risk analysis.

i. *Model 1 name* **Confidence Assessment**
Statement of confidence in this model resulting from the accreditation process.

2. *Model 2 name* **VV&A Plan**
   .
   .
   .